

Content Standards Informer

Curriculum and Instruction Unit



NOVEMBER 2011

MONTANA COMMON CORE STANDARDS: GETTING Every Student College and Career READY

<http://opi.mt.gov/MontanaCommonCoreStandards> a site with information and resources for transition to the Montana Common Core Standards and the SMARTER Balanced Assessment Consortium.

Getting Ready Introduction

Webinar: [Getting Ready for Transitions to the Proposed Common Core Standards and Assessments Intro](#)

PowerPoint: [Getting Ready for Transitions to the Proposed Common Core Standards and Assessments Intro](#)

Fact Sheet: [Getting Ready for Transitions to the Proposed Common Core Standards and Assessments](#)

FAQs: [Getting Ready for Transitions to the Proposed Common Core Standards and Assessments](#)

Montana Common Core Standards Overview and Implementation Workshop will be held December 1-2, 2011, at the Red Lion, Helena, Montana. The overview and implementation sessions will be 8:00 a.m. to 4:00 p.m. on Thursday, December 1, 2011. Thursday will include breakout sessions for District curriculum, Mathematics content, and English Language Arts and Literacy content. The optional training to be a facilitator session will be 8:00 a.m. to 4:00 p.m. on Friday, December 2, 2011.

Lunch will be provided for this event as well as reimbursement for a substitute teacher. OPI Renewal units are also available.

Visit the OPI [Common Core State Standards](#) page; see Current News to register for the December training. **Registration for the December training will close Friday, November 18, 2011.**

Regional Service Areas

The Montana Regional Service Areas (RSAs) provide professional development to educators in Montana. Currently workshops are available on Gifted and Talented Education, Science, Information Literacy and Library Media and Technology standards, School Counseling and Indian Education for All. Beginning in December, they will be adding workshops on implementing the Montana Common Core Standards.

Regional Service Areas:

PESA – Prairie Educational Service (Region I)
MNCSR – Montana North Central Educational Services Region (Region II)
MRESA3 – Montana Regional Education Service Area 3 (Region III)
RESA4U – Regional Education Service Area 4 You (Region IV)
WM - CSPD – Western Montana – Comprehensive System of Personnel Development (Region V)

To contact the RSAs about the projects listed above or other professional development needs that your district has, review the Web page on the OPI site at:

http://www.opi.mt.gov/Programs/Index.html?gpm=1_12.

Early Grades

Virtual Field Trips in Pre-K and Primary Classrooms:

The November 2011 edition of *Young Children*, a publication from the National Association for the Education of Young Children (NAEYC), has an article on incorporating virtual field trips into pre-K and primary classrooms. A virtual field trip (VFT) is a technology-based experience that allows children to take an educational journey without leaving the classroom (Cox & Su 2004). These multimedia presentations bring the sights, sounds, and descriptions of distant places to learners (Klemm & Tuthill 2003). Virtual field trips vary in complexity. They can range from a single PowerPoint or video presentation to a multifaceted virtual experience integrating photos, videos, text, audio, videoconferencing, and Internet resources. To learn more about virtual field trips, visit:

http://www.naeyc.org/files/yc/file/201111/Kirchen_Virtual_Field_Trips_Online%201111.pdf.



Internet Resources for Virtual Fieldtrips (VTF):

<http://www.uen.org/tours/>

<http://www.teacher.scholastic.com/fieldtrp/index.htm>

<http://www.meetmeatthecorner.org/>

<http://pbskids.org/rogers/picpic.html>

<http://www.whitehouse.gov/about/interactive-tour>

<http://www.sites.ext.vt.edu/virtualfarm/main.html>

Book Study Resource

Mind in the Making: The Seven Essential Skills Every Child Needs by Ellen Galinsky is receiving great attention from the early childhood field.

As a faculty member at Bank Street College of Education, researcher, and president of the Families and Work Institute, Ellen Galinsky has spent her career pursuing the “essential life skills” children need to cope with modern life and achieve to their full potential.

For *Mind in the Making*, Galinsky groups the findings of more than a hundred outstanding researchers in child development and neuroscience into seven areas: (1) focus and self-control; (2) perspective taking; (3) communicating; (4) making connections; (5) critical thinking; (6) taking on challenges; and (7) self-directed, engaged learning.

If you are interested in joining a conversation with Ellen Galinsky, she will be responding to questions and comments during an online event from November 7-11, 2011. Please access <http://www.naeyc.org/event/mind-in-the-making> for further information.

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The National Association for the Education of Young Children (NAEYC) National Conference

The NAEYC National Conference took place the first week in November in Orlando, Florida. If you were not able to attend, you may be interested in following the conference Twitter feed. To follow the conference tweets, search and follow #naeycAC. Enjoy!

Terry Barclay, Early Grades Curriculum Specialist
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Gifted and Talented Education

The Montana Regional Service Areas (RSAs) provide professional development to educators in Montana. Currently workshops are available on Gifted and Talented Education focusing on Level I (introduction) and Level II (more in depth) workshops on the following topics: Characteristics of the Gifted student - identification, matching services to student need, removing barriers to student learning and Response to Intervention (RtI) for Gifted and Talented Education.

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Vacant, Gifted and Talented Specialist



Library-Information Literacy

Here is my agenda from the 2011 AASL Conference. Please let me know if there are any topics or sessions that you are interested in knowing more about. I have included links to resources and sessions that are available freely on the Web.

Wednesday, October 26

[Preconference: All Aboard! Evaluate, Plan and Report to Build Library Support](#)

Thursday, October 27

[Learning Commons Presentation: A Way of Knowing: Storytelling as a Connector in Libraries](#)

[Learning Commons Presentation: Ten Steps to Better Web Research](#)

[Learning Commons Presentation: Big6 by the Month](#)

[Learning Commons Presentation: School Librarian Image](#)

[Learning Commons Presentation: Inviting Student Participation in the Library](#)

Opening General Session: Nicholas Carr

Friday, October 28

[Information Literacy and Executive Skills with the Big6](#)

Information Literacy: Turning the page from high school to college

Research Curriculum Gymnastics: Using TRAILS as a Springboard to a FLIP

Learning Commons Presentation: Using the Bookstore Model of Classification in an Elementary Library

[Empowering Students through Self Assessment](#)

NASTEMP Meeting



Saturday, October 29

You're going to make it after all: A Road Map to Becoming Your School's Technology Leader

Closing Session: Dr. Mimi Ito, Digital Media, New Learners of the 21st Century

Communication and Collaboration

SLMD Listserv – please e-mail Colet Bartow (cbartow@mt.gov) if you would like to be added to this highly informative listserv. You can also visit the Montana Teacher-Librarian wiki (<http://www.opi.mt.gov/groups/mtl>) for more information and resources useful to Montana schools. Check out new resources for assessment, automation and facilities.

Colet Bartow, Library-Information Literacy Curriculum Specialist
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Mathematics

APPLICATIONS ARE OPEN FOR THE EINSTEIN FELLOWSHIP PROGRAM

Attention K-12 STEM educators: Are you an experienced educator who is ready to make a difference in education policy on a national scale? If so, consider applying for an Albert Einstein Distinguished Educator Fellowship and prepare for a year of unique opportunities. As an Einstein Fellow, you will spend a school year in Washington, D.C., sharing your expertise with policy makers. You may serve your Fellowship with one of several government agency sponsors such as the Department of Energy, NASA, the National Science Foundation, National Oceanic and Atmospheric Administration, or in the office of a member of Congress.

The goal of the Einstein Fellowship program is to provide an opportunity for teachers to inform national policy and improve communication between the K-12 STEM education community and national leaders. Selection is based on exemplary experience in K-12 STEM teaching; demonstrated leadership in the community; an understanding of national, state, and local education policy; and communication and interpersonal skills. The Fellowship program was created in 1990 with support from the MacArthur Foundation. Congress formalized the program in 1994 by passing the Albert Einstein Distinguished Educator Fellowship Act. The Triangle Coalition administers the program under the direction of the U.S. Department of Energy. The application deadline is January 5, 2012. To learn more about the program and to apply, visit www.einsteinfellows.org or e-mail einsteinfellows@triangle-coalition.org.



MATHEMATICS EDUCATION TRUST (METs) WINTER CYCLE OF GRANTS

Are you hoping to try an innovative project or improve your mathematics teaching skills; but you are encountering financial obstacles? NCTM's MET can help. MET channels the generosity of contributors through the creation and funding of grants, awards, honors and other projects that support the improvement of mathematics teaching and learning.

MET is currently accepting applications for the winter cycle of grants, scholarships, and awards. For a complete listing and explanation of available opportunities, visit www.nctm.org/met. Remember, the **deadline to apply is November 11, 2011**.

Opportunities for pre-k through grade 5 teachers include \$3,000 Using Music to Teach Mathematics Grant, Emerging Teacher-Leaders in Elementary School Mathematics, Teacher Professional Development, Improving Students' Understanding of Geometry, Classroom Research, Mathematics Course Work Scholarships, and Future leader initial NCTM Annual Conference Attendance Awards.

Opportunities for grades 6-8 teachers include \$8,000 Equity in Mathematics Grant, Teacher Professional Development, Engaging Students in Learning Mathematics, Improving Students' Understanding of Geometry, Classroom Research, Mathematics Graduate Course Work Scholarships, Summer Mathematics Study and Future leader initial NCTM Annual Conference Attendance Awards.

Opportunities for grades 9-12 teachers include \$2,000 Mathematics Graduate Course Work Scholarships, connecting mathematics to Other Subject Areas, Teacher Professional Development, Classroom Research, and Future leader initial NCTM Annual Conference Attendance Awards.

Opportunities for prospective teachers includes the Future leader initial NCTM Annual Conference Attendance Awards.

MoMATH CAMPAIGN TO PROMOTE MATHEMATICS

[Welcome to the Museum of Mathematics!](#)

Mathematics illuminates the patterns and structures all around us. Our dynamic exhibits and programs will stimulate inquiry, spark curiosity, and reveal the wonders of mathematics. The Museum will have its grand opening in 2012 at 11 East 26th Street in Manhattan, New York.

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[Infant and Baby MoMath T-Shirts Now Available](#)

Just in: “onesie” and baby-sized versions of our popular MoMath T-shirts. Now your whole family can show their support for America’s only Museum of Mathematics! Click [here](#) to purchase a T-shirt today.

[Math Encounters Videos Now Available Online](#)

Video from our *Math Encounters* presentations are now online! Click [here](#) to view the videos. Every *Math Encounters* is recorded and will be made available online as soon as possible. Watch momath.org and mathencounters.org for updates.

[The Math Midway](#)

Our exciting, hands-on traveling exhibition highlights the engaging and playful nature of mathematics. The *Math Midway* is making appearances at science and technology centers across the country. Click [here](#) for more information about the *Math Midway*.

[Math Mondays at Make](#)

The Museum of Mathematics has partnered with *Make Magazine* to produce [Math Mondays](#), a weekly column on Make: Online featuring fun, experiential, and puzzling items that explore different aspects of mathematics.

Jean Howard, Mathematics Curriculum Specialist
jhoward@mt.gov

Science

FREE Elementary Science, Technology, Engineering, and Mathematics (STEM) Curriculum!

Visit www.citytechnology.org for some tremendous elementary STEM resources. Click on the [Force and Motion](#) and [Energy Systems](#) links for curriculum units that integrate engineering, science, math, literacy and art, in the context of children designing their own toys, cards. All of the curriculum emphasizes the use of every day materials found in most homes and classrooms.

If you find this curriculum useful and would like to assist the developer, Gary Beneson, with feedback, please contact him at benenson@ccny.cuny.edu.



The Billings Section of the Society of Petroleum Engineers is pleased to announce the availability of a newly created grant program designed to encourage more students to attend Montana's regional and state science fairs.

DEADLINE: December 2, 2011

Any Montana teacher, public or private, may apply for funding in support of students attending one the following five science fairs:

- Billings Clinic Science Expo, Billings
- Great Falls Invitational Science Fair, Great Falls
- Hi-Line Fair, Havre
- Montana Tech Regional Science and Engineering Fair, Butte
- Montana State Science Fair, Missoula

To complete the application, visit the following link: <http://www.meamft.org/Uploads/files/Our%20Members/K-12/Application.pdf>

Region 2 Training Opportunity for Science Fair

Blaine, Cascade, Chouteau, Glacier, Hill, Liberty, Pondera, Teton, and Toole Counties

Montana North Central Educational Service Region to Offer Science Fair Project Workshop in Great Falls

Montana North Central Educational Service Region 2 (MNCESR) is planning a Science Fair Projects workshop to be held in Great Falls at the Fish, Wildlife, and Parks conference room in early December. The workshop will cover project selection, safety, sources of information, write-ups, backboards, and the use of science inquiry in doing controlled experiments with an independent and a dependent variable. The writing of the title, hypothesis, abstract, procedure, results, and conclusion will be discussed as well as using charts, graphs, and statistics in reporting the results. MNCESR presenters Bill Peterson and Larry Fauque will be the facilitators. The two-day workshop will be offered for 15 OPI renewal units or one continuing education credit to be purchased by the participants. The presenters will provide information about applying to the Baker Foundation for funds for materials and equipment to do science fair projects. When plans are completed, flyers will be sent to all schools in Region 2. For more information, please contact Gaye Genereux, MNCESR Director, at gayegenereux@yahoo.com, or (406) 378-3136.

**Never Underestimate the Difference You Make in the Lives of Children:
Montana Native Wins Nobel Prize in Physics!**

Congratulations to Brian Schmidt, a Montana native, recent winner of the Nobel Prize in physics! Dr. Schmidt, a professor from the Research School of Astronomy and Astrophysics at the Australian National University, earned the Nobel for his role in the discovery that the universe is expanding at an accelerating rate. Dr. Schmidt was born in Missoula while his parents were attending the University of Montana. He spent most of his school years in Missoula, Helena, and Lincoln. After receiving the award, Dr. Schmidt contacted Hawthorne Elementary School Principal Deb Jacobsen to tell her that the school "set me up to be who I am today." To read more about this tremendous scientist, go to the following link:
[Montana Nobel Prize Winner.](#)

Albert Einstein Distinguished Educator Fellowship Program

The application is open for the 2012-13 Albert Einstein Distinguished Educator Fellowship Program. This program is available to current K-12 science, technology, engineering, and mathematics educators with demonstrated excellence in teaching.

Selected teachers spend a school year in Washington, D.C., sharing their expertise with policy makers. Einstein Fellows may serve in a congressional office or in one of several government agencies such as the Department of Energy, NASA, or the National Science Foundation. Fellows receive a monthly stipend and professional travel and moving budget.

The goal of the Einstein Fellowship Program is to provide an opportunity for teachers to inform national policy and improve communication between the K-12 STEM education community and national leaders. The Fellowship Program was created in 1990 with support from the MacArthur Foundation. The Triangle Coalition for Science and Technology Education manages the Program under the direction of the U.S. Department of Energy.

Applicants must be U.S. citizens, be currently employed full time in a public or private elementary or secondary school or school district, and must have been teaching full time in a public or private elementary or secondary school for at least five of the last seven years. Applications are due January 5, 2012.

For more information about the program and to apply, visit: www.einsteinfellows.org.

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STEM Video Game Challenge Opportunity

The CPB-PBS KIDS Ready To Learn initiative is pleased to announce an "open call" for proposals from public television stations interested in creating awareness of the 2012 National STEM Video Game Challenge by organizing and promoting at least one engagement event in their local community that encourages middle school students, high school students, college students, and/or educators to create games for the PBS KIDS stream of this year's Challenge.

Stations are encouraged to collaborate with local community partners affiliated with The Challenge's national outreach partners such as the Girl Scouts and Boys & Girls Clubs. Stations may also wish to convene events at libraries, youth centers, middle schools, high schools, or college campuses.

You can learn more about the National STEM Video Game Challenge at www.stemchallenge.org.

Proposals are due no later than 5 pm EST, on **November 18, 2011**. Please contact Chris Seifert at chris_seifert@montana.pbs.org if you are interested in learning more about this opportunity.

Kristen Crawford, Science Curriculum Specialist
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